



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,468	10/10/2006	Toshihiro Kasai	285461US0PCT	3897
22850 7590 07/05/2007 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER REDDY, KARUNA P	
			ART UNIT	PAPER NUMBER
			1713	
			NOTIFICATION DATE	DELIVERY MODE
			07/05/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No. 10/566,468	Applicant(s) KASAI ET AL.	
	Examiner Karuna P. Reddy	Art Unit 1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/31/2006</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Objections

1. Claim 4 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only and cannot depend from any other multiple dependent claim. See MPEP § 608.01(n).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Boessler et al (US 4, 199, 486).

Boessler et al disclose a plastisol comprising an organic plasticizer and particles of a methyl methacrylate copolymer, said copolymer comprising a core portion and a surrounding shell portion (abstract). See table I for an example of acrylate polymer comprising core and shell material wherein the content of methyl methacrylate in shell material is greater than in the core material. By gelation in suitable molds, shaped bodies can also be prepared (column 5, lines 48-49).

Therefore, Boessler et al anticipate the instant invention.

4. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Kasai (US 2001/0016612 A1).

Kasai discloses an acrylic polymer fine particles which comprise primary particles P of 250 nm or more in average particle diameter having a core shell structure and plastisols prepared using the same. In the fine particles, a core polymer C and a shell polymer S are copolymers comprising 20 to 85 mol% and 20 to 79.5 mol % of methyl methacrylate respectively.

Therefore, Kasai anticipates instant invention.

5. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Ikegami et al (JP 07233299).

Ikegami et al disclose an acrylic sol containing as main components fine acrylic polymer particle having at least a bilayered structure comprising a core and a shell, a dialkyl phthalate plasticizer (abstract). The acrylic polymer contains 50% or more of methacrylates selected from ethylhexyl methacrylate, n-butyl methacrylate, isobutyl methacrylate, t-butyl methacrylate and cyclohexyl methacrylate as a component of the core material (paragraph 0015). As copolymerizable monomer mention is made of alkyl (C₁-C₃) methacrylate (paragraph 0015). It is desirable to copolymerize at least a kind of methacrylate chosen from methyl methacrylate in an amount of 50 wt% or more as a component of the shell material (paragraph 0016). The molecular weight of acrylic polymer particle is 10,000 to 2,000,000 (paragraph 0017). The mean

Art Unit: 1713

particle diameter of an acrylic polymer particle is 0.1 to 100 (paragraph 0018).

The acrylic sol of this invention can be used in cast molding and slash molding (paragraph 0023).

Therefore, Ikegami et al anticipate the instant invention.

Conclusion

The "X" references (WO 2000/001748 A1 and JP 07-233299 A) from the international search report has been considered and used in the rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karuna P. Reddy whose telephone number is (571) 272-6566.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service

Art Unit: 1713

Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KL
Karuna P Reddy
Examiner
Art Unit 1713